Appl. No. 08/924,785
Amdt. Dated Sept. 29, 2003
Reply to Office Action of July 1, 2003

CISCO-0193

AMENDMENTS TO THE CLAIMS:

The following listing of claims will replace all prior versions of claims in the application:

1-12. (Cancelled)

13. (Currently Amended) A system for managing a network device from a remote client, the system comprising:

a network device control software program ~~included in~~ executing on the network device, the network device control software program comprising:

a binary file comprising a downloadable unit embedded in the binary file, the downloadable unit including (a) a communicator component for establishing a communications channel between the remote client and the network device control software program, (b) an interface component for enabling the remote client to communicate with the network device control software program, and (c) a configuration component for managing the network device;

an extractor for extracting the embedded downloadable unit from the binary file;

a web server for communicating with the remote client and for transmitting the downloadable unit to the remote client;

a communicator for receiving and interpreting commands from the remote client to the network device; and

a configuration component for performing commands from the remote client on the network device,

wherein the remote client utilizes the downloadable unit to manage the network device.

Appl. No. 08/924,785
Amdt. Dated Sept. 29, 2003
Reply to Office Action of July 1, 2003

CISCO-0193

14. (Original) The system of claim 13, wherein the network device includes a network router.

15. (Original) The system of claim 13, wherein the downloadable unit includes a Java™ class.

16. (Original) The system of claim 13, wherein the downloadable unit includes an ActiveX™ control.

17. (Original) The system of claim 13, wherein the downloadable unit includes more than one downloadable unit.

18. (Original) The system of claim 17, wherein the downloadable units have been combined into downloadable unit bundles.

19. (Previously Presented) The system of claim 18, wherein the downloadable units have been combined into downloadable unit bundles according to downloadable unit function.

20. (Previously Presented) The system of claim 18, wherein the downloadable units have been combined into downloadable unit bundles according to version information.

Appl. No. 08/924,785
Amdt. Dated Sept. 29, 2003
Reply to Office Action of July 1, 2003

CISCO-0193

21. (Previously Presented) The system of claim 13, wherein the network device control

software program includes an operating system.

22. (Previously Presented) The system of claim 21, wherein the network device includes

a router.

23. (Original) The system of claim 13, wherein the web server communicates with the

remote client using a file transfer protocol.

24. (Original) The system of claim 13, wherein the web server communicates with the

remote client using an internet protocol.

25-39. (Cancelled)

40. (Currently Amended) A method comprising:

receiving from a remote client at a network device a request to manage the network

device, the network device including a network device control software program having a binary

file and executing on the network device,

locating a downloadable unit which corresponds to the request and is embedded in the

binary file;

extracting the downloadable unit from the binary file; and

Appl. No. 08/924,785
Amdt. Dated Sept. 29, 2003
Reply to Office Action of July 1, 2003

CISCO-0193

forwarding the downloadable unit to the remote client,

wherein the remote client utilizes the downloadable unit to manage the network device.

41. (Currently Amended) A system comprising:

means for receiving from a remote client at a network device a request to manage the

network device, the network device including a network device control software program having

a binary file and executing on the network device;

means for locating a downloadable unit corresponding to the request embedded in the

binary file;

means for extracting the downloadable unit from the binary file; and

means for forwarding the downloadable unit to the remote client,

wherein the remote client utilizes the downloadable unit to manage the network device.

42. (Currently Amended) A computer-storage medium storing program code for causing

a computer to perform the steps of:

receiving from a remote client at a network device a request to manage the network

device, the network device including a network device control software program having a binary

file and executing on the network device;

locating a downloadable unit which corresponds to the request and is embedded in the

binary file;

extracting the downloadable unit from the binary file; and

Appl. No. 08/924,785
Amdt. Dated Sept. 29, 2003
Reply to Office Action of July 1, 2003

CISCO-0193

forwarding the downloadable unit to the remote client,

wherein the remote client utilizes the downloadable unit to manage the network device.

43. (Currently Amended) A system comprising:

a web server for receiving from a remote client at a network device a request to manage a

network device control software program which has a binary file with an embedded

downloadable unit for performing the request,

the downloadable unit including:

a communicator component for establishing a communications channel between

the remote client and the network device control software program,

an interface component for enabling the remote client to communicate with the

network device control software program, and

a configuration component for managing the network device control software

program;

an extractor coupled to the web server for extracting the downloadable unit from the

binary file; and

a communicator coupled to the extractor for forwarding the downloadable unit to the

remote client upon request of the remote client,

wherein the remote client utilizes the downloadable unit to manage the network device

control software program which is executing on the network device.

Appl. No. 08/924,785
Amdt. Dated Sept. 29, 2003
Reply to Office Action of July 1, 2003

CISCO-0193

44. (Currently Amended) A method for modifying available remote device management services of a network device, the method comprising:

obtaining a new downloadable unit for performing a new service, the new downloadable unit including:

a communicator component for establishing a communications channel between a remote client and the network device,

an interface component for enabling the remote client to communicate with the new downloadable unit, and

a configuration component for managing the network device;

retrieving a network device control software program binary file having an embedded old downloadable unit for performing an old service from the network device;

substituting the old downloadable unit with the new downloadable unit; and

loading the network device control software program binary file having the new downloadable unit embedded in the binary file onto the network device,

wherein the network device control software program is executed by the network device.

45. (Previously Presented) The system of claim 13, wherein the network device control software program includes a list of available functions.

46. (Previously Presented) The system of claim 45, further comprising a downloadable unit for each of the available functions.

Appl. No. 08/924,785
Amdt. Dated Sept. 29, 2003
Reply to Office Action of July 1, 2003

CISCO-0193

47. (Currently Amended) A network device, comprising:

a network device control software program executing on the network device and

comprising:

a downloadable unit embedded in the binary file, the downloadable unit including

(a) a communicator component for establishing a communications channel between a

remote client and the network device control software program, (b) an interface

component for generating a user-interface to enable a user at the remote client to enter

requests to configure the network device, and (c) a configuration component for

forwarding the requests from the remote client to the network device over the

communications channel;

communication code that receives and interprets the requests forwarded from the

remote client to the network device, and

configuration code that performs the requests to configure the network device.

48. (Previously Presented) The network device of claim 47, further comprising a web

server for communicating with the remote client and for transmitting the downloadable unit to

the remote client upon request of the remote client, wherein the remote client utilizes the

downloadable unit to manage the network device.

49. (Previously Presented) The network device of claim 48, wherein the web server

communicates with the remote client using a file transfer protocol.

Appl. No. 08/924,785
Amdt. Dated Sept. 29, 2003
Reply to Office Action of July 1, 2003

CISCO-0193

50. (Previously Presented) The network device of claim 48, wherein the web server communicates with the remote client using an internet protocol.

51. (Previously Presented) The network device of claim 47, further comprising a network router.

52. (Previously Presented) The network device of claim 47, wherein the downloadable unit includes a Java™ class.

53. (Previously Presented) The network device of claim 47, wherein the downloadable unit includes an ActiveX™ control.

54. (Previously Presented) The network device of claim 47, wherein the downloadable unit includes more than one downloadable unit.

55. (Previously Presented) The network device of claim 54, wherein the downloadable units have been combined into downloadable unit bundles.

56. (Previously Presented) The network device of claim 55, wherein the downloadable units have been combined into downloadable unit bundles according to downloadable unit function.

Appl. No. 08/924,785
Amdt. Dated Sept. 29, 2003
Reply to Office Action of July 1, 2003

CISCO-0193

57. (Previously Presented) The network device of claim 55, wherein the downloadable units have been combined into downloadable unit bundles according to version information.

58. (Previously Presented) The network device of claim 47, wherein the network device control software program includes an operating system.

59. (Previously Presented) The network device of claim 58, further comprising a router.

60. (Previously Presented) The network device of claim 47, wherein the network device control software program includes extractor code for extracting the embedded downloadable unit.

61. (Canceled)